

L 45163-66 EWT(d)/EWP(1) IJP(c) BB/GG  
ACC NR: AP6027521 (A) SOURCE CODE: UR/0317/66/000/005/0036/0039

AUTHOR: Tenen, D., (Colonel); Prosin, N., (Colonel)

26  
B

ORG: none

TITLE: Training equipment 16

SOURCE: Tekhnika i vooruzheniye, no. 5, 1966, 36-39

TOPIC TAGS: training equipment, logic circuit, military training

ABSTRACT: A description and specifications are given of a trainer designed for both group and individual training of military personnel in subjects programmed beforehand. The trainer is a set of electromechanical and radio engineering logic circuits providing simultaneous control of the rate at which the material is mastered. The trainer operates under four regimes: group training with an instructor, group training without an instructor, group and individual control, and, finally, individual training. A block diagram, circuits, and an overall view of the device are given in the original article. [DW]

SUB CODE: 09/ SUBM DATE: none/

Card 1/1 *Am*

TENENBAUM, A.B., kand.ekon.nauk

Production and consumption under socialism. Trudy Khar'.inzh.-  
ekon.inst. 8:5-23 '57. (MIRA 12:6)  
(Economics)

ARTEMENKO, G.P.[Artemenko, H.P.]; VORONINA, O.F.; SEMEYKIN, M.S.;  
FILONICH, V.S.[Filonych, V.S.]; NOSACH, I.P.; CHULKOV,  
T.G.[Chulkov, T.H.]; TENENBAUM, A.B.KIFORENKO, I.S.  
[Kyforenko, I.S.], red.; LEVCHENKO, O.K., tekhn. red.

[Work incentives in the period of the large-scale building  
of communism] Stymuliuvannia pratsi v period rozhornutoho  
budivnytstva komunizmu. Kyiv, Derzhpolitvydav URSR, 1964.  
166 p. (MIRA 17:3)

1. Sotrudniki kafedry politicheskoy ekonomii Kharkovskogo  
inzhenerno-ekonomicheskogo instituta (for all except  
Kiforenko, Levchenko).

TENENBAUM, A.E.; GUREVICH, I.L.; BREZHNEV, A.I.

Producing courmarone-indene resins and their use in industry.  
Nefteper. i neftekhim. no.8:16-18 '64. (MIRA 17:10)

1. Moskovskiy ordena Trudovogo Krasnogo Znameni institut  
neftekhimicheskoy i gazovoy promyshlennosti im. akad. Gubkina.

TENENBAUM, A.E.; GUREVICH, I.L.; BRIZHNEV, A.I.

Obtaining coumarone-indene resins from the pyrolysis products of petroleum fractions. Nefteper. i neftekhim. no.9:26-27 '64.

(MIRA 17:10)

1. Moskovskiy ordena Trudovogo Krasnogo Znameni institut neftekhimicheskoy i gazovoy promyshlennosti im. akad. Gubkina.

KURIL'CHIKOV, Ye.A.; TENENBAUM, A.L.; LIPINSKIY, S.P.; LAVROVA, I.N.

Spinning of staple fiber without guide-pulley. Khim.volok.  
no.5:38-41 '59. (MIRA 13:4)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut iskusstvennogo  
volokna (VNIIV).  
(Rayon spinning)

TENENBAUM, Barbara (Warszawa, ul. Oczki 6. IV Klin. Chor. Wewn. A. M.)

Treatment of ventricular tachycardia with the procaine amide pronestyl.  
Polski tygod. lek. 13 no.2:51-56 13 Jan 58.

1. Z IV Kliniki Chorob Wewnętrznych A. M. w Warszawie kierownik: prof.  
dr med. Zdzisław Askanas.

(TACHYCARDIA, ther.

procaine amide in ventric. tachycardia (Pol))

(PROCAINE AMIDE, ther. use

ventric. tachycardia (Pol))

SLUCKA, Cecylia; TENENBAUM, Barbara

Rhythm of the coronary sinus. *Polski tygod. lek.* 15 no.12:425-428 21 Mr '60.

1. Z IV Kliniki Chorob Wewnętrznych A.M. w Warszawie kierownik:  
prof.dr med. Z. Askanas.  
(HEART physiol.)



MAZURCZAK, Jerzy; TENENBAUM, Barbara

Immuno-electrophoretic studies on arteriosclerosis with the use of the antiserum "arteriosclerosis". Postepy hig. med. dosw. 15 no.5: 599-606 '61.

1. Z IV Kliniki Chorob Wewnetrznych AM w Warszawie Kierownik: prof. dr Z.Askanas.

(ELECTROPHORESIS) (ARTERIOSCLEROSIS)  
(IMMUNE SERUMS)

TENENBAUM, Barbara

Cancer of the pancreas simulating general infection. Polski tygod.  
lek. 16 no.25:959-961 19 Js '61.

1. Z IV Kliniki Chorob Wewnetrznych, A.M. w Warszawie; kierownik:  
prof. dr Z. Askanas.

(PANCREAS neoplasms)

TENENBAUM, Barbara; MAZURCZAK, Jerzy

Attempted clinical evaluation of atherosclerosis with the use of the immunoelectrophoretic test. Polskie arch. med. wewn. 31 no.8:1085-1092 '61.

1. Z IV Kliniki Chorob Wewnętrznych AM w Warszawie Kierownik: prof. dr med. Z. Askanas.

(ARTERIOSCLEROSIS blood) (BLOOD PROTEINS)

TENENBAUM, Barbara; HARTEL-ULKOWSKA, Narcyza; RUKSZAN, Edward; CHODKOWSKA,  
Stefania

A case of Recklinghausen's disease with parathyroid adenocarcinoma.  
Endokr. pol. 13 no.4:501-510 '62.

1. IV Klinika Chorob Wewnętrznych AM w Warszawie Kierownik: prof. dr  
Z. Askanas Zakład Radiologii Lekarskiej AM w Warszawie Kierownik: prof.  
dr W. Zawadowski Oddział Torakochirurgii Instytutu Gruzlicy w Warszawie  
Kierownik: prof. dr L. Manteuffel Zakład Patologii Instytutu Gruzlicy  
w Warszawie Kierownik: prof. dr S. Chodkowska.  
(OSTEITIS FIBROSA) (PARATHYROID NEOPLASMS)  
(ADENOCARCINOMA)

TENENBAUM, Barbara; MAZURCZAK, Jerzy; URSYN-NIEMCEWICZ, Witold

Immuno-electrophoretic studies on acute-phase proteins. Pol. arch.  
med. wewnet. 32 no.6:597-604 '62.

1. Z IV Kliniki Chorob Wewnętrznych AM w Warszawie Kierownik: prof.  
dr med. Z Askanas i z Kliniki Gruzlicy Płuc AM w Białymstoku Kierownik:  
doc. dr med. W. Pregowski.

(C REACTIVE PROTEIN chem) (ELECTROPHORESIS)

MAZURCZAK, Jerzy; TENENBAUM, Barbara

Value of the immuno-electrophoretic test in the diagnosis of early stages of atherosclerosis. Pol. arch. med. wewnet. 32 no.8:957-964 '62.

1. Z IV Kliniki Chorob Wewnetrznych AM w Warszawie Kierownik: prof. dr med. Z. Askanas.

(IMMUNOELECTROPHORESIS)

(ARTERIOSCLEROSIS)

POLAND

MAZURCZAK, Jerzy, TENENBAUM, Barbara, and ASKANAS, Aleksander; Fourth Clinic of Internal Diseases (IV Klinika Chorob Wewnętrznych), AM [Akademia Medyczna, Medical Academy] in Warsaw (Director: Prof. Dr. Z. ASKANAS)

"Immunoelectrophoretic Studies of the Serum and Aortal Wall Extracts of Deceased Persons."

Warsaw, Postepy Higieny i Medycyny Doswiadczalnej, Vol 17, No 3, 63, pp 355-359.

Abstract: The investigation -- a continuation of a series attempting to determine whether biological changes occurring in sclerosis originate in the blood or in the walls of the blood vessels -- deals with the study of the factor responsible for a third line of precipitation in immunoelectrophoretic tests. It was established that it also appears in extracts of the aorta of deceased sclerotic patients, but since it is more discernible in the blood, the assumption is made that it originates there and -- under certain circumstances -- passes into the wall of the vessels. There are 15 references, of which 5 are Polish, two in German, and eight are Western.

1/1

TENENBAUM, Barbara

Antigenic properties of C-reactive proteins from patients with different diseases. Pdl. arch. med. wewn. 33 no.2:155-160 '63.

1. Z IV Kliniki Chorob Wewnętrznych AM w Warszawie Kierownik: prof.  
dr med. Z. Askanus.

(C-REACTIVE PROTEIN)	(MYOCARDIAL INFARCT)	(PNEUMONIA)
(IMMUNOELECTROPHORESIS)	(ANTIGENS)	



ASKANAS, Zdzislaw; MALANOWICZ, Wiera; MAZURCZAK, Jerzy; TENENBAUM, Barbara;  
ZAMBROWICZ, Krystyna

Evaluation of the activity of heparinoids in vivo and in vitro.  
Pol. tyg. lek. 20 no.33:1237-1240 16 Ag '65.

1. Z IV Kliniki Chorob Wewnętrznych AM w Warszawie (Kierownik:  
prof. dr. med. Zdzislaw Askanas).

TENENBAUM, Barbara

Immunoelectrophoretic localization of C-reactive protein.  
Pol. arch. med. wewnet. 35 no.6:831-834 '65.

1. Z IV Kliniki Chorob Wewnętrznych Akademii Medycznej w  
Warszawie (Kierownik: prof. dr. med. Z. Askanas).

RECHKALOV, A.I. (Nizhniy Tagil); TENENBAUM, B.Ya. (Nizhniy Tagil)

Increasing the reliability of the basic car parts, Zhel.dor.transp.  
47 no.10:38-41 G '65. (MIRA 18:10)

1. Glavnyy konstruktor Ural'skogo vagonostroitel'nogo zavoda (for Rechkalov). 2. Nachal'nik laboratorii Ural'skogo vagonostroitel'nogo zavoda (for Tenenbaum).

TENENBAUM, F.N.

[Glass fiber and glass plastic; bibliographic index of Russian and foreign books and periodical articles for 1959-1960] Stekliannoe volokno i stekloplastiki; bibliograficheskii ukazatel' otechestvennoi i inostrannoi knizhnoi i zhurnal'noi literatury za 1959-1960 gg. Moskva, Otdel nauchno-tekhn. informatsii, 1961. 162 p.

(MIRA 14:12)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut steklyannogo volokna.  
(Bibliography--Glass fibers) (Bibliography--Glass reinforced plastics)

L 45402-66 EWT(d) IJP(c)

ACC NR: AR6016619

SOURCE CODE: UR/0044/65/000/012/B116/B117

AUTHORS: Ushkalov, V. F.; Tenenbaum, E. M.

TITLE: On the determination of the <sup>16</sup>eigenvalues of matrices on the digital computer "Ural-1" 39B

SOURCE: Ref. zh. Matematika, Abs. 12B614

REF SOURCE: Tr. Dnepropetr. in-ta inzh. zh.-d. transp., vyp. 53, 1964, 68-74

TOPIC TAGS: eigenvalue, numeric solution, digital computer / Ural-1 digital computer

ABSTRACT: Precise methods are investigated for determining the eigenvalues of real nonsymmetric matrices, applied to the digital computer "Ural-1". The method of bordering, which is insensitive to particular singularities of matrices, is recommended for preliminary computation of the coefficients of the characteristic polynomial  $P_n(\lambda)$  of matrices up to tenth order. The method is based on direct computation of the coefficients of the polynomial  $P_k(\lambda)$  of the bordered matrix  $A_{kk}$  from the known coefficients of the polynomial  $P_{k-1}(\lambda)$  of the bordered matrix  $A_{k-1,k-1}$ . A block-scheme is given for programming computations by the given method for the coefficients of  $P_k(\lambda)$ , composed in the operation of a floating point. Numerical methods are described for finding roots of the characteristic equation  $P_n(\lambda) = 0$ . A brief

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UDC: 518.512.86

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ACC NR: AR6016619

discussion is given of the methods of Lobachevskiy, Bernoulli, and Khichkok. A block-scheme is given for programming computations of roots of a n-th degree algebraic equation using Khichkok's method. It is noted that simultaneous use of the method of bordering for determining the coefficients of the characteristic polynomial and the method of Khichkok allows rapid and rather precise finding of all eigenvalues of a real nonsymmetric matrix up to tenth order on the digital computer "Ural-1". Bibliography 5 titles. I. Shelikhova [Translation of abstract]

SUB CODE: 12,09

hs

Card 2/2

7/11 11/11/11 7/11  
AUTHORS: Posik, L.N., Tenenbaum, I.M.

89-7-5/32

TITLE: The Application of a Special Apparatus for Express Analysis of Mined Ores by Means of  $\gamma$ -Radiation (Primeneniye spetsial'noy apparatury dlya ekspress-analizov dobytykh rud po  $\gamma$ -izlucheniyu)

PERIODICAL: Atomnaya Energiya, 1957, Vol. 3, Nr 7, pp. 28-35 (USSR)

ABSTRACT: For the operative computation of the amount and the quality of the mined ores and of the production in various containers (wagons, trucks, chests) and also for the separation of the rock enriched with uranium, the filling material, etc., the PKC device (station-control radiometer) is widely used. The present paper describes these devices as well as the mining-biological conditions for their use. Also these problems are mentioned which can be solved by means of this device. From the point of view of the rational application of the devices PKC 1 and PKC 2 for the operative calculation of mining for the estimation of production, and for measures to be taken against loss of metal as well as against the impoverishment of the ore, all ore mines can be subdivided into two groups: 1.) Such with a summary working of the ore, 2.) Such with selective working of the ore. In mines with summary working the entire

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The Application of a Special Apparatus for Express  
Analysis of Mined Ores by Means of  $\gamma$ -Radiation

89-7-5/32

operative calculation of the mined ore and of the ore destined for commerce is based upon the  $\gamma$ -express analyses of the entire mine quantity in wagons and trucks by means of the PKC-2 devices. In the case of selective working estimation of the mined ore is carried out with the PKC-1 devices. This calculation serves as a basis for the determination of the mined quantities in the case of hydrothermal vein-like deposits with rich ore bodies of small thickness. Also the express analysis of rich commercial ores is carried out by means of devices of the PKC-1 type. By means of the devices PKC-2 it is possible not only to determine the activity of ores and their nature in an operative manner in the individual containers, but also to automatize the tedious work of sorting-in and discharging from trucks. There are 8 figures, 1 table, and 3 references, 3 of which are Slavic.

SUBMITTED: October 9, 1956

AVAILABLE: Library of Congress

Card 2/2

1. Radiometers - Applications
2. Ores (Radioactive) - Analysis - Equipment
3. Mining engineering - USSR



TENENBAUM, I.M.

Use of the radiometric method in the prospecting and working of  
uranium deposits. Trudy MGRI 36:125-136 '59. (MIRA 15:5)  
(Radioactive prospecting) (Uranium ores)

PETROV, G.I.; KUTENKOV, M.V.; TENENBAUM, I.M.; YEVSEYEVA, L.S.;  
KONSTANTINOV, M.M., nauchnyy red. [deceased]; SHASHKIN, V.L.,  
nauchnyy red.; SURAZHSKIY, D.Ya., nauchnyy red.; ZAVODCHIKOVA,  
A.I., red.; MAZEL', Ye.I., tekhn.red.

[Methods of geological and geophysical exploration and control in  
uranium mines] Metody geologo-geofizicheskogo obelushivaniia  
uranovykh rudnikov. Moskva, Izd-vo Gos.kom-ta Soveta Ministrov  
SSSR po ispol'zovaniu atomnoi energii, 1960. 217 p.

(MIRA 13:10)

(Mining geology)

(Uranium ores)

S/089/62/012/006/016/019  
B1C2/B1C4

AUTHORS: Kozlov, F. V., Tenenbaum, I. M.

TITLE: Systematic errors of gamma-ray assaying and possible means to eliminate them

PERIODICAL: Atomnaya energiya, v. 12, no. 6, 1962, 533-536

TEXT: The systematic errors occurring in the process of measuring the gamma-ray intensity (in  $\mu\text{r/hr}$ ) of ores and its conversion to uranium equilibrium per cents (cf. Shashkin, Atomnaya energiya, II, No. 1, 48; No. 2, 157, 1957) are estimated. From a comparison of the results of gamma-ray and "groove assaying" for five uranium deposits, it can be seen that the first method yields values which are higher by 27-133%. For poor ores the values agree within 3-9%, and for rich ores gamma-ray assaying shows a 6-53% systematic depression of the values. In order to get reliable accuracy estimates such comparisons were made for 1166 different samples from five mines and for 46 samples from four mines of one deposit with impregnated ore. The effects which lead to the raised values in gamma-ray assaying were analyzed. The actual content of uranium can be

Card 1/2

Systematic errors of gamma-ray ...

S/089/62/012/006/016/019  
B102/B104

determined from the curves of the above-mentioned comparison. There are  
4 figures.

SUBMITTED: October 28, 1961

Card 2/2

TENENBAUM, L. A.

55

PHASE I BOOK EXPLOITATION 80V/6012

Akademiya nauk SSSR. Institut avtomatiki i telemekhaniki.

Avtomaticheskoye regulirovaniye i upravleniye (Automatic Regulation and Control) Moscow, Izd-vo AN SSSR, 1962. 526 p. Errata slip inserted. 9000 copies printed.

Resp. Ed.: Ya. Z. Tsypkin, Professor, Doctor of Technical Sciences;  
Ed. of Publishing House: Ye. M. Grigor'yev; Tech. Ed.: I. M. Dorokhina.

PURPOSE: This book is intended for scientific research workers and engineers concerned with automation.

COVERAGE: The book is a collection of articles consisting of papers delivered at the 7th Conference of Junior Scientists of the Institute of Automation and Telemekhanika, Academy of Sciences USSR, held in March 1960. A wide range of scientific and technical questions relating to automatic regulation and control is covered.

Card 1/12

Automatic Regulation (Cont.)

SOV/6012

The articles are organized in seven sections, including automatic control systems, automatic process control, computing and decision-making devices, automation components and devices, statistical methods in automation, theory of relay circuits and finite automatic systems, and automated electric drives. No personalities are mentioned. References are given at the end of each article.

TABLE OF CONTENTS:

PART I. AUTOMATIC CONTROL SYSTEMS

Andreychikov, B. I. The effect of dry friction and slippage [play] on error during reverse gear operation of servo-feed systems

3

Andreychikov, B. I. Dynamic accuracy of machine tools with programmed control

14

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Automatic Regulation (Cont.)

SOV/6012

Rozovskiy, A. L. Contactless pulse-code telemetry system 342

Silayev, V. N. A programming computer for automating  
type-casting [linotype] machine composition 349

Tenenbaum, L. A. Effect of flapper speed on the charac-  
teristics of a nozzle-flapper type valve element 360

PART V. STATISTICAL METHODS IN AUTOMATION

Gadzhiev, M. Yu. Optimal retuning of the carrier fre-  
quencies of useful signals and noise studied in the  
light of games theory 370

Kochetkov, Ye. S. Estimates of the simplest statistical  
characteristics of stationary random processes 375

Nappel'baum, E. L. Detection of a useful signal against  
a background of non-Gaussian noises 382

Card 9/12

1 12-60-000

BPA(1)/EAT(1)/BDS AFDC/AFFIC/ASD Pd-L

S/271/63/000/004/009/045

AUTHOR: Tenenbaum, L. A.

TITLE: Concerning the influence of damping speed on the characteristic of the "nozzle-damper" element

PERIODICAL: Referativnyy zhurnal, Avtomatika, telemekhanika i vychislitel'naya tekhnika, no. 4, 1963, 13, abstract 4A77 (Avtomat. regulirovaniye i upr, Moscow, AN SSSR, 1962, 360-369)

TEXT: The author examines the solution of a system of hydrodynamic equations for finding the dynamic characteristics of a "nozzle-damper" element, and the determination of the area of adaptability of the quasi-stationary hypothesis. He obtains the first approximation for the dynamic expenditure characteristic and the power characteristic of a "nozzle-damper" element and gives the boundaries of their adaptability. He determines the area in which, in the case of dynamic computations, the hypothesis of quasi-stationary condition is permissible. Five illustrations; bibliography of 4 items. T. R.

[Abstracter's note: Complete translation]

Card 1/1



TENENBAUM, L. A.

Elektropneumatic low-pressure converter for converting faint  
signals of electric current. Priborostroenie no.10:7-9  
0 '62. (MIRA 15:10)

(Automatic control)

S/103/63/024/002/015/020  
D201/D308

9.2.85

AUTHOR:

Tenenbaum, L.A. (Moscow)

TITLE:

Static design of electro-pneumatic transducers with power compensation of air jet reaction

PERIODICAL:

Avtomatika i telemekhanika, v. 24, no. 2, 1963, 255-267

TEXT:

The author analyzes the methods of design of electro-pneumatic transducers in which the feedback circuit compensating jet reaction contains an operational amplifier. Description of the circuit is given. The expression for the static characteristic of the transducer (in linear approximation) is derived for the following conditions: 1) The force exerted by the jets of both control and feedback nozzles is proportional to the pressure in front of the respective nozzle. 2) The static characteristic may be approximated by two straight line sections. 3) The characteristic of the amplifier in the feedback circuit is linear. 4) The rigidity of the electromechanical transducer is constant. 5) The force developed by the

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Static design of electro-pneumatic ...

S/103/63/024/002/015/020  
D201/D308

latter is proportional to the electrical input signal. The effect of changes of supply pressure and the compensation parameters are analyzed next. The effective areas of reaction of the control and feedback nozzles and their respective changes during operation are determined. An experimental low-pressure electro-pneumatical transducer gave results which are in good agreement with theory. Finally the expressions for the errors, which determine the overall accuracy of the device, are derived. There are 7 figures. *✓*

SUBMITTED: June 9, 1962

Card 2/2

TENENBAUM, L.A. (Moskva)

Recently developed electro-pneumatic transformers and positioners.  
Avtom. i telem. 24 no.10:1427-1438 0 '63. (MIRA 16:11)

with a clearance of 0.002–0.012 mm. A ball-type negative-feedback adder uses

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**CIA-RDP86-00513R001755220019-9"**

VLASOV, Yu.A., inzh.; TENENBAUM, L.V., inzh.

Increasing the reliability of safety clutches. Mashinostroenie  
no.5:82 S-U '64 (MIRA 18:2)

TENENBAUM, L.V., inzh.; VLASOV, Yu.A., inzh.; KUTSYN, L.M., inzh.

Increasing the reliability and durability of manure conveyors.  
Mashinostroenie no.3:100-101 My-Je '65. (MIPA 18:6)



TENENBAUM, L.V., inzh.; VILASOV, Yu.A., inzh.

Stand for testing transmissions with flexible couplings.  
Mashinostroyeniye no.4:36-37 JL-Ag '65.

(MIRA 18:8)

TENENBAUM, L.V., inzh.; VIASOV, Yu.A., inzh.

Increasing the reliability and durability of the PSN-1 silo  
loader. Mashinostroenie no.5:97-98 S-O '65.

(MIRA 18:9)

KUTSYN, L.M., inzh.; TENENBAUM, L.V., inzh.; GRINBERG, V.L., inzh.

Turning screw conveyor. Mashinostroenie no.6:100 N-D '65.  
(MIRA 18:12)

TEHRBAUM, L.Ya.

New method of calculating casing perforations for hydrogeological wells. Razved. i okh. nedr 21 no.4:46-50 J1-Ag '55. (MLRA 9:2)  
(Boring)

*Tenenbaum, L. Ya.*

AUTHOR: Tenenbaum, L. Ya.

132-58-2-10/17

TITLE: On the Question of the Principles Used in Compiling Hydro-Geological Surveying Maps of the Territory of the USSR  
(K voprosu o printsipakh sostavleniya obzornykh gidrogeologicheskikh kart territorii SSSR)

PERIODICAL: Razvedka i Okhrana Nedr, 1958, Nr 2, pp 43-46 (USSR)

ABSTRACT: The author describes different conditions to be observed in the compilation of the hydro-geological surveying maps for various regions of the USSR. There are 5 Soviet references.

ASSOCIATION: Tsentral'no-Kazakhstanskoye geolupravleniye (Geological Administration of Central Kazakhstan)

Card 1/1 1. Geophysical surveying maps-Compilation

TENENBAUM, L.Ya.

New method of computing casing perforations for hydrogeological  
wells. Razved. i okh. nedr. 22 no.2:58-62 F '56. (MLRA 9:6)  
(Wells)

TENENBAUM, L.Ya.

Map predicting the water potential based on the principle of permeability. Razved. i okh. nedr 27 no.10:43-48 0 '61.  
(MIRA 15:3)

1. Karazhal'skaya geologorazvedochnaya ekspeditsiya.  
(Kazakhstan--Water, Underground--Maps) (Rocks--Permeability)

GRINBAUM, I.Ya.; GRINBAUM, I.I.

Simplified method for calculating the water permeability  
flow coefficient for rocks on the basis of per-unit  
pumping output. Razved. i okh. nefti 31 no.2:31-36. 1964.

1. Karazhal'skaya geologorazvedochnaya ekspeditsiya (I.Ya.  
Grinbaum). 2. Kazakhskiy politekhnicheskii institut (I.I.  
Grinbaum).



TEHNENBAUM, M. ; PETCU, V.

Manufacture of a gangway from prestressed concrete. p. 305.

REVISTA CONSTRUCTIILOR SI A MATERIALELOR DE CONSTRUCTII. (Asociatia Stiintifica a Inginerilor si Technicienilor din Romania si Ministerul Constructiilor si al Materialelor de Constructii) Bucuresti, Romania. Vol. 10, no.6, June 1958.

Monthly List of East European Accessions (EEAI) LC, Vol. 8, no.6, June 1959

Uncl.

*B*

16

"Surface Analyzer" for Estimation of Roughness. (In Russian.) M. M. Tennenbaum. *Factory Laboratory* (U.S.S.R.), v. 12, May 1947, p. 635-637.

Motion of a needle point over the surface of the specimen is amplified by 2 piezoelements and recorded graphically by means of a moving pen. Curves produced by the instrument and true surface profiles are presented in pairs for several types of surfaces. Reason for differences is explained on the basis of the finite dimensions of the needle point.

ASAC-SLA METALLURGICAL LITERATURE CLASSIFICATION

FROM SOURCE  
SUBMIT ON QWY 181

TENENBAUM, Eng. M. M.

Friction

Study of changes in the micro-geometry of friction surfaces during the breaking in period. (Truly) NAMI no. 53, 1948.

Monthly List of Russian Accessions. Library of Congress, September 1952. UNCLASSIFIED

TENENBAUM, M. M.

1A 14924

USSR/Engineering - Surfaces, Quality  
Machining

Feb 50

"Analysis of Changes in the Roughness of Machined  
Surfaces," M. M. Tenenbaum, Sci Res Auto and  
Engine Inst, 4 pp

"Zavod Lab" Vol XVI, No 2

States that, in studying wear process, it is  
essential to know character of roughness changes,  
e. g., dynamics of roughness destruction process,  
in addition to roughness of friction surfaces be-  
fore and after test. Describes experiments on  
subject using profilograph and microscope.

159T24

TENENBAUM, M.M.

Methods for wear tests of bearing materials. Tren. i izn.mash.  
no.7:99-102 '53. (MLRA 9:9)  
(Bearings (Machinery)) (Mechanical wear)

KISIN, V.B.; TENENBAUM, M.M.

Increasing the operating dependability and life of SKH-11 scraper  
conveyers. Ugol' 29 no.1:25-29 Ja '54. (MLRA 7:1)

1. Orguglemash.

(Coal-mining machinery)

TENENBAUM, M.M., kandidat tekhnicheskikh nauk.

Role of coal in the process of friction and wear of the parts of  
coal-mining machines. Ugol' 30 no.2:21-25 F '55. (MIRA 8:4)

1. Orguglemash.  
(Coal-mining machinery)

TENENBAUM, Mikhail Mikhailovich, kandidat tekhnicheskikh nauk; CHANTSEV,  
M.V., otvetstvennyy redaktor; HADWINSKAYA, A.A., tekhnicheskii  
redaktor; ANDREYEVA, G.G., tekhnicheskii redaktor

[Principal kinds of breakdown in parts of coal mining machinery]  
Osnovnye vidy razrusheniia detalei ugol'nykh mashin. Moskva,  
Ugletekhizdat, 1956. 90 p. (MIRA 9:8)  
(Coal mining machinery)



"APPROVED FOR RELEASE: 07/16/2001

CIA-RDP86-00513R001755220019-9

APPROVED FOR RELEASE: 07/16/2001

CIA-RDP86-00513R001755220019-9"

~~TEDEBAUM~~, M.M., kandidat tekhnicheskikh nauk; GUTERMAN, V.M., kandidat tekhnicheskikh nauk.

Investigating the wear resistance of steel in abrasive media.  
Vest.mash.36 no.12:25-29 D '56. (MLBA 10:2)

1. Vsesoyuznyy proyektno-tekhnologicheskii i eksperimental'nyy  
institut ugol'nogo mashinostroyeniya.  
(Tool steel--Testing) (Mechanical wear)

AUTHOR: TEVENBAUM, M.M. PA - 3567  
 TITLE: Estimate of Resistance of Metals against Scratching. (Ob otsenke  
 sepretivleniya metallov tsarapaniyu, Russian)  
 PERIODICAL: Zhurnal Tekhn. Fiz. 1957, Vol 27, Nr 5, pp 1106-1117 (U.S.S.R.)

ABSTRACT: A triangular diamond pyramide with a  $65^\circ$  angle between the surfaces and the central axis was used as a tool. The pyramid was shifted with the edge pointing in a forward direction at an angle of  $15^\circ$  to the surface of the grinding surface.  
 The experiments carried out showed that the resistance on the occasion of scratching depends essentially on the geometry of the scratch and has little to do with the scratching force.  
 Scratching resistance is the reciprocal value of the square of the width of the scratch and is in a certain relation to microstrength. In pure metals this dependence is of linear character. Scratching resistance depends not only on the strength value but also on the structure and the chemical composition of the steels.  
 In the case of cold hardening resistance against scratching increases.  
 The connection between the resistance against scratching and the resistance against wear of metals is shown. The latter was determined

Card 1/2

PA - 3567

**Estimate of Resistance of Metals against Scratching.**

by means of a grinding device.

Investigation of substances by scratching is distinguished by that carried out with a grinding device by its greater structural sensitivity and by a single mechanic action. The ranges of applicability of both methods are thus determined. (With 2 Tables, 11 Illustrations, and 12 Bibliographic References).

**ASSOCIATION:** VNIPTUGLEMAH, Moscow  
**PRESENTED BY:**  
**SUBMITTED:** 26.9.1956  
**AVAILABLE:** Library of Congress

Card 2/2

TENENBAUM, M.M., kand. tekhn. nauk; KOGAN, A.M., inzh.

Criteria for estimating the life time of machines. Vest. mash. 38  
no.4:65-68 Ap '58. (MIRA 11:3)

(Machinery)

ZAK, P.S.; ZHURAVLEV, V.L.; ROMANOV, V.A., otv.red.; SADOV, N.T.,  
red.; GOTOVTSEV, A.A., red.; GRINBERG, A.Ya., red.; ZUBEKOV, V.T.,  
red.; KOGAN, A.M., red.; KRUGLIKOV, A.V., red.; REBCUN, K.K.,  
red.; NAZIMOV, N.M., red.; NEYMARK, A.M., red.; MOTYAKHOV, M.A.,  
red.; SPEVAK, V.Ya., red.; TENENBAUM, M.M., red.; SHNEIDER, E.I.,  
red.; ALADOVA, Ye.I., tekhn.red.; SHKLYAR, S.Ya., tekhn.red.

[Design and manufacture of globoid gears] Proektirovanie i  
izgotovlenie globoidnykh peredach. Moskva, Ugletekhizdat, 1958.  
87 p. (Tekhnologiya ugol'nogo mashinostroeniia, no.2).

(MIRA 13:2)

(Gearing)

KOGAN, A.M.; ~~TENENBAUM, A.M.~~

Estimating the durability of coal mining machines. Tekh.ugol.  
mash. no.1:57-63 '58. (MIRA 12:8)

1. Vsesoyuznyy nauchno-issledovatel'skiy i proyektno-tekhnologicheskii institut ugol'nogo mashinostroyeniya.  
(Coal mining machinery)

SOV/137-50-1-1247

Translation from: Referativnyy zhurnal. Metallurgiya, 1959, Nr 1, p 169 (USSR)

AUTHOR: Tenenbaum, M. M.

TITLE: Employment of Alloy Steels and Cast Irons in the Manufacture of Mining Equipment Abroad (Primeneniye legirovannykh stalev i chugunov pri proizvodstve gornoshakhtnogo oborudovaniya za rubezhom)

PERIODICAL: Tekhnol. ugol'n. mashinostroyeniya, 1958, Nr 1, pp 69-71

ABSTRACT: Brief survey, containing data on the grade designations and the chemical composition of steels employed abroad for part of pneumatic tools, combination drilling and loading machines, cutting and loading machines, compressors and compressed-air engines, conveyers of the scraper, reciprocating, and belt types, cars, cages, crushers, and screens.

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Card 1/1



SOV/58-59-7-15158

Translation from: Referativnyy Zhurnal Fizika, 1959, Nr 7, p 81 (USSR)

AUTHOR: Tenenbaum, M.M.

TITLE: Extrema of Gas Pressure <sup>1</sup>

PERIODICAL: Uch. zap. Mosk. gorn. ped. in-ta, 1958, Nr 85, pp 91 - 106

ABSTRACT: The author discusses certain concrete phenomena in the light of some conclusions of V.K. Semenchenko's theory (RZhFiz, 1957, Nr 2, 2131) of generalized critical phenomena pertaining to supercritical transitions. The author considers the equation of the quasi-spinodal curve for supercritical transitions in the coordinates  $v$ ,  $T$ , and  $p$ . It is established that the direction of the quasi-spinodal at the critical point is connected with the sign of the third isothermal derivative of entropy with respect to volume. In addition to the general discussion, a quasi-spinodal is plotted for the Dieterici and van der Waals equations of state, for which the equation of the quasi-spinodal is obtained in the above-mentioned coordinates.

A.A. Senkevich ✓

Card 1/1

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Abrazheniya nauk SSSR. Institut mashinovedeniya. Komissiya po tekhnologii mashinostroyeniya. Seminar po kachestvu poverkhnosti

Reactive pervinikosti catalay maslin, sbornik 4. Tekhnologicheskoye  
fatny orshobki. Metrologiya i pribory. Eksploataatsionnyye  
itny povorotnogo slova (Surface quality of machine tools). Re-  
lection of Articles, No. 4. Processing Factors in Machine  
Metrologiya and Instruments. Operational Properties of the Boundary  
Layer. Maslov, Iradov AS 3538, 1959, 291 p. (Series: IIA Army)  
Krate aliq inserted, 3,200 copies printed.

**Sponsoring Agency:** Akademiya nauk SSSR. Institut matematicheskoy teorii

Resp.: Ed.: P.Ye. D'yachenko, Professor; Ed. of Publishing House:  
G.M. Gerasimov; Tech. Ed.: T.P. Polosova.

**REMARK:** This collection of articles is intended for technical personnel concerned with the quality of surface finishes of machine parts.

**CONCLUSIONS.** This collection of articles deals with problems of surface roughness and the effect of surface roughness on the wear and strength of machine parts. Among the topics discussed are the nature of an inhomogeneous surface, the effect of surface roughness on the effect of cutting feeds and cutting speeds on surface roughness, the roughness of machined parts, the effect of any direction on the wear of plane friction surfaces, methods and means for measuring surface roughness, and the processing of roughograms of finished surfaces. No personalities are mentioned, although a fuller account of the articles.

**Kasatov, N.A., and A.A. Mikheylov. Investigation of the Failure of Parts Due to Cracks Formed in Underlying Chrome-Plated Surfaces.** 204

**Deppenberg, I. J. - Work Hardening by Hammering to Increase the Fatigue Strength of Machine Parts**

Voronev, A. L. Effect of High-Frequency Cutting-Tool Vibrations on Surface Roughness in Turning

**W. L. A., Experience Gained From the Introduction of a Pneumatic Instrument for Checking Surface Roughness**

Antel'kiy, A. V. Principles of Controlling the Process of Finish Flooding with Floating Abrasive Sticks

Greene, E.P. Experience Gained at the Ger'kovsky automated (Oor'ly Automotive Plant) from the Introduction of QOST (All-Union State Standards) for Surface Roughness

**Improve the Surface Smoothness and the Quality of  
Turning Tools**

Part 1, V.I. Surface Roughness of Watch Parts

**Berraglia, G. A. Investigation of the Effect of Finishing Hole  
Angles on the Endurance of High-Strength Steels**

Writa, M.Ye. Effect of the Microgeometry and Microstructure of Yielding Surfaces on Their Wear Resistance

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Chibryan, L.A. Lubricating Properties of Molybdenum Disulfide 278

assigned. V.I. - The Problem of Processing Profiles of Finished Surfaces

AVAILABLE: Library of Congress

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7-3-68

TEIENBAUM, M.M.; GUTERMAN, V.M.

Classification characteristics of the kinds of wear of coal-  
machine parts. Trudy Sem.po kach.poverkh. no.4:274-277 '59.  
(Mechanical wear) (MIRA 13:6)

TENENBAUM, M.M., kand.tekhn.nauk; ARTSIMOVICH, V.N.

Protecting reducing gear parts on coal-mining machinery from abrasive wear. Ugol' 34 no.2:43-45 F '59. (MIRA 12:4)

(Coal mining machinery—Lubrication)

(Mechanical wear)

TENENBAUM, Mikhail Mikhaylovich. Prinimali uchastiye: BEGAGOYEN, I.A., dotsent, kand.tekhn.nauk; RUBANOVICH, Ya.G., inzh. MARKIZ, Yu.L., otv.red.; ASTAKHOV, A.V., red.izd-va; IL'INSKAYA, G.M., tekhn.red.

[Wear-resistance of parts and the durability of mining machines]  
Iznosostoikost' detalei i dolgovechnost' gornykh mashin. Moskva, Gos.nauchno-tekhn.izd-vo lit-ry po gornomu delu, 1960. 245 p.  
(MIRA 14:4)

1. Krivorozhskiy gornorudnyy institut (for Begagoyen). 2. Rukovoditel' gruppy Spetsial'nogo konstruktorskogo byuro leningradskogo zavoda "Pnevmatika" (for Rubanovich).  
(Mining machinery) (Mechanical wear)

8/123/61/000/014/006/045  
A004/A101

AUTHOR: Tenenbaum, M. M.

TITLE: Methods of investigating mechanical properties of the surface layer of metals and alloys by the scratch test

PERIODICAL: Referativnyy zhurnal, Mashinostroyeniye, no. 14, 1961, 24-25, abstract 14A188 (V sb. "Povysheniye iznosostoykosti i sroka sluzhby mashin. v. 1", Kiyev, AN UkrSSR, 1960, 396-404)

TEXT: The author presents the results of investigations of the physical-mechanical surface properties of different materials using static and dynamic scratch methods. Static scratching was effected with a trihedral diamond pyramid having an angle of  $65^{\circ}$  between the equilateral edges and the central axis. The angle between the edge and the polished section surface was  $15^{\circ}$ , the load on the pyramid amounted to 100 g. The scratching resistance was determined as a quotient resulting from division of the stress which was required at the beginning of the scratching by the cross section area of the scratch. The scratching resistance was compared with the relative resistance to wear obtained by testing the materials during friction on an abrasive surface. In order to carry out

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Methods of investigating mechanical ...

S/123/61/000/014/006/045  
A004/A101

dynamic scratching the CT-4 (ST-4) sclerometer has been developed which operates on the principle of a pendulum impact machine. The tests were carried out with the same pyramid that was used for static scratching. The diamond fixed to the upper part of the pendulum cut into the surface layer of the specimen being tested at a definite velocity and produced a flute in it. The work spent for the production of a flute of a given volume served as criterion. The author gives a detailed description of the sclerometer design. The rated scratching velocity amounted to 0.24 m/sec. Each test consisted in determining the scratching work and the flute width and length. The author comments on the results of determining the scratching work in pure metals and sintered carbides. There are 7 figures and 14 references. ←

I. Yanovskiy

[Abstracter's note: Complete translation]

Card 2/2

20408

S/109/60/005/012/006/035

E192/E482

9.3700 (1103, 1127, 1006, 2301)

AUTHOR: Tenenbaum, M.M.

TITLE: On the Method of Stationary Phase

PERIODICAL: Radiotekhnika i elektronika, 1960, Vol.5, No.12, pp.1909-1918

TEXT: The author studies the integral

$$\int_S F_0 e^{ik\Phi} dS$$

encountered in the study of wave diffraction. This has been studied previously in Ref.3, in which the first terms of the expansion have been found by a method which does not yield the succeeding terms, and in Ref.4, by a method which is used here to find further terms. The following assumptions are made: 1) in the plane (x,y) there is a single point O of stationary phase (see figure); 2) the point O is inside S and is remote from the boundary  $\Gamma$ . The above integral is transformed to a double integral

$$\int_0^{2\pi} d\theta \int_0^r F(r \cos \theta, r \sin \theta) e^{ik\Phi(r \cos \theta, r \sin \theta)} r dr, \quad (1')$$

Card 1/3



20408

S/109/60/005/012/006/035  
E192/E482

On the Method of Stationary ...

(Abstractor's note: in Eq.(1')  $k$  is a factor of the exponent, not an index as incorrectly printed in the original.)  
and expanded in inverse powers of  $k$  with the following assumptions made on the behaviour of the phase function  $\Phi(x,y)$  and the amplitude function  $F(x,y)$  in  $S$ : 1) the two functions have in  $S$  continuous partial derivatives of all orders and are expandable in Taylor series in the neighbourhood of the stationary point; 2) the second radial derivative of the phase at the stationary point does not vanish and is sign constant from  $0 - 2\pi$ ; the contour  $\Gamma$  bounds the region  $S$  in such manner that the first radial derivative of the phase remains sign constant over the entire region  $S$  except for the stationary point at which it vanishes. The expansion contains two types of terms, stationary terms dependent on the behaviour of the integrand in the neighbourhood of the stationary point and contour integrals. Acknowledgments are made to L.B.Tartakovskiy for putting the problem and giving it his attention during the study. There are 1 figure and 4 Soviet references.

SUBMITTED: January 7, 1960

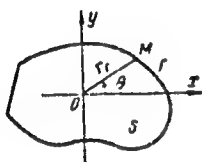
Card 2/3

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On the Method of Stationary ...

S/109/60/005/012/006/035  
E192/E482

Figure



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TENENBAUM, M.M.

Sclerometer for evaluationg the mechanical properties of surface  
layers of metals and alloys. Zav.lab. 26 no.2:236-238 '60.  
(MIRA 13:5)

1. Vsesoyuznyy nauchno-issledovatel'skiy i proektno-  
tekhnologicheskoy institut ugol'nogo mashinostroyeniya.  
(Alloys--Testing)

~~TENENBAUM, M.M.~~, YANOVSKIY, I.I., ARTSIMOVICH, V.N., PATRIKEYEVA, E.M.

Machine for testing hard-alloy tools for repeated impact. Zav.  
lab. 26 no.7:883-884 '60. (MIRA 13:7)

1. Vsesoyuznyy nauchno-issledovatel'skiy i proyektno-  
tekhnologicheskoy institut ugol'nogo mashinostroyeniya.  
(Testing machines)

TENENBAUM, M.M., kand.tekhn.nauk; KOSTROMIN, A.Ye., inzh.; ROMANENKO,  
N.K., inzh.; YANOVSKIY, I.I., inzh.

Thermal conditions of the performance of bits of cutting  
machines and coal combines. Vest.mash. 40 no.4:11-14  
Ap '60. (MIRA 13:6)  
(Coal mining machinery) (Thermal stresses)

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AUTHORS: Yanovskiy, I. I., Engineer; Tenenbaum, M. M., Candidate of Technical Sciences; Romanenko, N. K., Engineer

TITLE: Relieving internal stresses in soldering carbide tips on tools

PERIODICAL: Vestnik mashinostroyeniya, <sup>40-</sup>no. 5, 1960, 52-57

TEXT: Dimension changes from thermal expansion of metal are analyzed and a formula and a diagram are deduced for determining the proper linear deformation coefficient ( $\beta$ ) at which stresses in soldered joint would be zero in given case, i.e., at a definite solder solidification point, steel composition and austenite transformation temperature. The formula is

$$\beta' = T_{sol}(\alpha_{aust} - \alpha_T) - T_{tr}(\alpha_{aust} - \alpha_{dec}) - 20^\circ(\alpha_{dec} - \alpha_T) \quad (4)$$

where  $T_{sol}$  is the solidification point of the solder;  $\alpha_{aust}$  - the linear expansion factor of austenite,  $\alpha_{dec}$  - the linear expansion factor of austenite decomposition products;  $T_{tr}$  - steel transformation temperature;  $\alpha_T$  - the linear expansion factor of hard alloy of the tool tip;  $\beta'$  designates the theoretical ideal value of  $\beta$ . The approximate relation of  $\beta$  and relative increase at austenite decomposition is  $\delta v \approx 3\beta$ , and the relative expansion is determined by

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the formula

$$\delta V = \frac{V_{tr} - V_{aust}}{V_{aust}} \quad (5)$$

where  $V_{aust}$  - is the steel volume in austenitic state, and  $V_{tr}$  - in state after austenite decomposition. A series of  $\beta'$  values can be obtained by substituting different austenite transformation points  $T_{tr}$  into the formula (4). The linear expansion factor  $\alpha_{aust}$  for different steel grades varies between 17 and 23 x 10<sup>-6</sup> mm/mm · degree [Ref. 4; Spravochnik metallovedeniya i termicheskoy obrabotki (Handbook of metals and heat treatment) Metallurgizdat, 1956]. Substitution of different  $\alpha_{aust}$  into the formula is equivalent to the steel choice, and a series of such dependencies can be obtained for a certain solder with a known  $T_{sol}$ , or vice versa - different  $T_{sol}$  (which means different solders) can be substituted and a different series determined. The diagram presents two such series in graphical form. The dotted line indicates solders with  $T_{sol} = 906^{\circ}\text{C}$  (brass), and the solid line solders with  $T_{sol} = 1,083^{\circ}\text{C}$  (electrolytic copper). These are zero stress lines, and the coordinates are the austenite transformation temperatures ( $T_{tr}$ ) and  $\beta'$  values plus zones of structures forming in austenite decomposition. Approximate hardness values ( $H_B$ ) are included. The horizontal  $\beta = 0.0136$  line is

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Relieving internal stresses ...

the top boundary of structures. Below it there are in sequence: martensite, troostite - martensite, sorbite, pearlite, austenite. The practical use of the diagram is explained. The analysis proves that zero stress is practically impossible to obtain with copper for solder on steel grades that are used for cutter shanks at the time being. Brass solder is better, for it permits an entire range of possible isothermic heat treatment. The best steel for copper solder is a grade with austenite expansion  $20 \cdot 10^{-6}$  mm/mm · degree. It will give minimum internal stresses in a wide range of isothermic hardening temperatures. Obviously, the solder and steel compositions may be varied. The method is not yet sufficiently accurate for practical application, for the  $\alpha_{\text{aust}}$  and  $\beta$  values must be determined more accurately for different steel grades. In special literature structure transformations have not been taken into account in determinations of stresses in hard-alloy tools. A calculation example is made with transformation expansion accounted for, in a practical case of the work portion of coal cutting machine teeth. The calculated stresses have been verified by x-ray analysis at the Laptevskiy mashinostroitel'nyy zavod (Laptev Machinery Plant) (by A. P. Mokrov and N. L. Shapiro). It was stated that the calculation matched the x-ray data, but calculations without transformation temperatures and their effect taken into account gave stress values exceeding the x-ray data about

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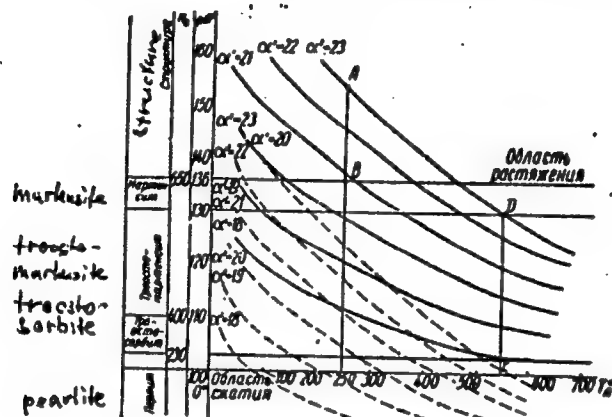
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### Relieving internal stresses ...

5 times. Despite rough approximations used in determining the effect of structure transformations in the steel shank, the beneficial effect of heat treatment is obvious. There are: 1 figure, 1 table and 7 references: 5 Soviet-bloc and 2 non-Soviet bloc.



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TENENBAUM, M.M.

Standardizing the methods for frictional and wearing tests.  
Standartizatsiia 25 no.6:11-16 Je '61. (MIRA 14:6)  
(Testing--Standards)

KLETKIN, M.I.; RABINOVICI, I.P.; TENENBAUM, M.M.

Operational safety and durability appraisal of agricultural machines. Analele agric zooteh 17 no.6:152-160 N-D'63.

KLETSKIN, M.I.; RABINOVICH, I.P., kand. tekhn. nauk; TENENBAUM, M.M.,  
kand. tekhn. nauk

Estimating the reliability and life of agricultural machines.  
Trakt. i sel'khoz mash. 33 no.5:1-4 My '63. (MIRA 16:10)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut sel'skokhozyayst-  
vennogo mashinostroyeniya. 2. Glavnyy konstruktor Vsesoyuznogo  
nauchno-issledovatel'skogo instituta sel'skokhozyaystvennogo  
mashinostroyeniya (for Kletskin).

KLETSKIN, M.I.; TENENBAUM, M.M., kand. tekhn. nauk

Increasing the reliability and durability of agricultural machinery.  
Trakt. i sel'khoz mash. no.8:16-19 Ag '64.

(MIRA 17:11)

1. Glavnyy konstruktor Vsesoyuznogo nauchno-issledovatel'skogo  
instituta sel'skokhozyaystvennogo mashinostroyeniya (for Kletskin).

KLIMCHUK, Yu.F.; TENENBAUM, M.M.

Method for applying a corrosive liquid to a rotating specimen  
in fatigue tests. Zav.lab. 31 no.3:360-361 '65.

(MIRA 18:12)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut sel'-  
skokhozyaystvennogo mashinostroyeniya.

TENENBAUM, M.M.; KLETSKIN, M.I.; YEREMEYEV, A.P.; PAYKIN, M.M.

Structural analysis of dust protecting devices for the bearing units of agricultural machinery. Trakt. i sel'khozmaash. no.8. (MIRA 18:10)  
29-32 Ag '65.

1. Vsesoyuznyy nauchno-issledovatel'skiy institut sel'skokhozyaystvennogo mashinostroyeniya, Moskva (for Tenenbaum, Kl-tskin).
2. Ryazanskoye gosudarstvennoye spetsial'noye konstruktorskoye byuro (for Yermeyev, Paykin).

L 24852-66 ENT(m)/ENP(w)/ENP(j)/I/ENP(t)/ETC(m)-6 IJP(c) JD/WM/DJ/GS/RM  
 ACC NR: AT6008956 (A) SOURCE CODE: UR/0000/65/000/000/0162/0178  
 107  
 61  
 B+1

AUTHOR: Tenenbaum, M. M.

ORG: none

TITLE: Analysis of abrasive wear during the friction of plastic against steel in the slip bearings of agricultural machines

SOURCE: Moscow. Institut mashinovedeniya. Plastmassy v podshipnikakh skol'zheniya; issledovaniya, opyt primeneniya (Plastics in friction bearings; research and experiment in application). Moscow, Izd-vo Nauka, 1965, 162-178

TOPIC TAGS: abrasive, antifriction bearing, teflon, agricultural machinery, friction, steel, lubricant seal

ABSTRACT: This article examines problems of the interaction of abrasive particles with plastic and steel specimens. Steel-abrasive grain-plastic systems are studied under normal loads and shearing forces (see Fig. 1). The activity of abrasion as a function of grain size, and the activity of wear of a steel-plastic coupling as a function of the number of abrasive particles in contact are also studied (see Fig. 2). It is found that, in the presence of abrasive particles in a frictional steel-plastic coupling, the amount of wear of the materials also depends upon whether the particles are crushed. The chief factor determining the wear of steel axles is the number and size of the abrasive particles in contact. Poroplast is

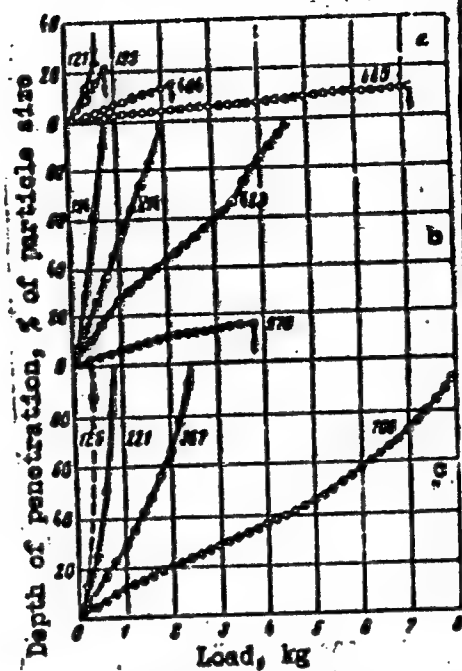
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Fig. 1. Effect of load on depth of penetration of abrasive particles into surface layer of plastic:  
 a - wood plastic,  $31.2 \text{ kg/mm}^2$ ;  
 b - ~~carbons~~,  $7.1 \text{ kg/mm}^2$ ;  
 c - teflon F-4,  $3.8 \text{ kg/mm}^2$ .

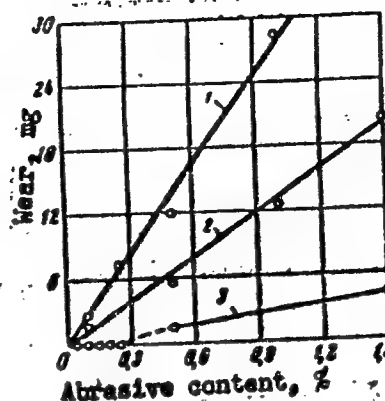


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Fig. 2. Wear by weight of steel roller versus size and concentration (wt %) of abrasive particles in lubricant: 1 -  $80\mu$ ; 2 -  $50\mu$ ; 3 -  $2-3\mu$ .



found to be a good element for dust-protective gaskets because of its ability to absorb a large amount of lubricant. Orig. art. has: 4 diagrams, 3 graphs, and 3 tables.

SUB CODE: 11/ SUBM DATE: 31Jul65/ ORIG REF: 008

Card 3/3 dda

TENENBAUM, Matvey Vasil'yevich. Prinimali uchastiye: NOTKIN, Vladimir Yefimovich; BATUROV, Gleb Nikolayevich; BELOV, Konstantin Aleksandrovich. RYAUZOV, N.M., prof., red.; KRESINA, I.Ya., red.isd-va; FOMICHEV, P.M., tekhn.red.

[Statistics of Soviet consumers' cooperative societies] Statistika sovetskoi potrebitel'skoi kooperatsii. Izd.3., ispr. i dop. Pod red. N.N.Riauzova. Moskva, Izd-vo Tsentrsoolusa, 1959. 308 p. (MIRA 13:4)  
(Cooperative societies--Statistics)

TENENBAUM, N																									
CO													112												
<p>Influence of avitaminotic nutrition on the flora of the digestive tract. N. TENENBAUM. <i>Med. Dorciadenius i Spolerna</i> 10, 426-33(433-4 French)(1929). -Fifteen white mice were examd. in order to show the character of the change in the flora of the digestive tract during avitaminotic nutrition with oats heated with H<sub>2</sub>O to 130° for 51 hrs. The mice lost wt. and death followed after 34 hrs. In the flora of the digestive tract the germs obtained from avitaminotic animals appeared more frequently of proteolytic and hemolytic character. The fermentation of carbohydrates was lessened and <i>Bac. paracloacas</i> predominated. J. KUČERA</p>																									
<p>ASH-SLA METALLURGICAL LITERATURE CLASSIFICATION</p>																									

*1-11-11-11, V.*

VOROB'YEV, S.; BERKOVICH, Z. (g. Ulan-Ude); PEREMYSLYY, D.; MATVEYEV, P.;  
BERKOVICH, N. (Knybyshev); VILL, Kh.; NOVIKOVA, I.; TENENBAUM, V.

Improve the procedure for issuing credit to the forest industry.  
Den. 1 kred. 16 no. 5:54-66 My '58. (MIRA 11:6)  
(Lumbering—Finance)

MOROZOV, S.D.; TENENGAUZER, I.I., inzh.-ekonomist

Fruits of creative work. Stroi. mat. 11 no.6:19-21 Je '65. (MIRA 18:7)

1. Direktor Chernovitskogo kirpichnogo zavoda No.3 (for Morozov).

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TENENGOL'TS, Lev Yakovlevich; OKUNEV, Yu., podpolkovnik, red.;  
SOKOLOVA, G.F., tekhn. red.

[Faults in the electric equipment of motor vehicles]  
Neispravnosti v elektrooborudovanii avtomobilei. Izd.2.  
perer. i dop. Moskva, Voenizdat, 1964. 199 p.  
(MIRA 17:3)

TENENGOL'TS, S.M.

Water damage to surfaces of cylinder bushings in type HPS "Merlis"  
diesels. Azerb. neft. khoz. 38 no.7:43-45 J1 '59.

(MIRA 13:2)

(Diesel engines--Cylinders) (Corrosion and anticorrosives)

ARYKHOV, S.G., inzh.; TENENGOL'TS, S.M., inzh.

Self-regenerating filter for feed-water purification. Energetik  
9 no.7:20-22 J1 '61. (MIRA 14:9)  
(Feed-water purification)

ABDURASHITOV, S.A.; TENENGOL'TS, S.M.

Investigating hydraulic parameters of the filter for purifying sea water from mechanical admixtures. Za tekh.prog. 3 no.8:31-34  
Ag '63. (MIRA 17:1)

1. Azerbaydzhanskiy institut nefti i khimii imeni M.Azizbekova (for Abdurashitov). 2. Neftepromyslovoye upravleniye imeni XXII s"yezda Kommunisticheskoy partii Sovetskogo Soyuza (for Tenengol'ts).